Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Drug-drug interactions: percentage of patients who received a prescription for a target medication during the measurement period and who were dispensed a concurrent prescription for a precipitant medication.

Source(s)

Pharmacy Quality Alliance (PQA). Technical specifications for PQA approved measures. Springfield (VA): Pharmacy Quality Alliance (PQA); 2015 Jul. 66 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients who received a prescription for a target medication during the measurement period and who were dispensed a concurrent prescription for a precipitant medication.

Note: The purpose of this performance measure is for the evaluation of prescription drug plans and ambulatory/community pharmacies. Ideally, the performance measure will be used to provide feedback to plans and pharmacies for benchmarking of their performance and for tracking improvement as quality improvement initiatives are implemented. The Pharmacy Quality Alliance (PQA) list of drug-drug interactions (DDIs) is intended to be a subset of important interactions and not a complete list of all interactions.

Rationale

Adverse drug events are increasingly acknowledged as an area of major concern in medical care. Drug–drug interactions (DDIs) may lead to often-preventable adverse drug events and patient injury.

Evidence for Rationale

Kuhle J. (Senior Director Performance Measurement, Pharmacy Quality Alliance). Personal communication. 2013 Oct 29. 3 p.

Primary Health Components

Drug-drug interactions (DDIs); target medication; precipitant medication

Denominator Description

Patients who received a target medication (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The number of patients in the denominator who were dispensed a concurrent precipitant medication during the measurement period (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

This measure was pilot tested during measure development (see process below), which included reliability and validity testing.

Process for Development and Testing of Performance Measures

Step 1: Pharmacy Quality Alliance (PQA) workgroups identify measure concepts that may be appropriate for development into fully specified performance measures. The workgroups focus on specific aspects of the medication-use system and/or specific therapeutic areas. The workgroups are open to all members of PQA and use a consensus-based approach to identify, prioritize and recommend the measure concepts that are deemed to be highly important for supporting quality improvement related to medications.

Step 2: The measure concepts that are recommended for further development through a vote by the PQA workgroups are forwarded to the PQA Quality Metrics Expert Panel (QMEP) for evaluation and refinement. The QMEP reviews the measure concepts to provide an initial assessment of the key properties of performance measures (i.e., feasibility, usability and scientific validity). The measure concepts that are rated highly on these key properties will then undergo technical specification.

Step 3: The draft measure is provided to PQA member organizations for their comments prior to preparing technical specifications for pilot testing. The QMEP reviews member comments, edits the draft measure

accordingly and poses testing questions based on this all-member feedback.

Step 4: PQA selects partners to test the draft measure. These partners are often PQA member health plans or academic institutions with expertise in quality and performance measure testing. The testing partner implements the draft technical specifications with their existing datasets and provides a report to PQA that details testing results and recommendations for modifications of the technical specifications.

Step 5: The workgroup that developed the measure reviews the testing results and provides comment. The QMEP reviews the workgroup comments, testing results, recommendations and potential modifications and provides a final assessment of the feasibility and scientific validity of the draft performance measures.

Step 6: Measures that are recommended by the QMEP for endorsement are posted on the PQA web site for member review, written comments are requested, and a conference call for member organizations is scheduled to address any questions. This process allows members to discuss their views on the measures in advance of the voting period.

Step 7: PQA member organizations vote on the performance measure(s) considered for endorsement.

Evidence for Extent of Measure Testing

Pharmacy Quality Alliance (PQA). Process for development and testing of performance measures [available at http://www.pqaalliance.org]. Springfield (VA): Pharmacy Quality Alliance (PQA); 2014. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Managed Care Plans

Other

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

No age restriction

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Health and Well-being of Communities
Making Care Safer
Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Safety

Data Collection for the Measure

Case Finding Period

The measurement year

Denominator Sampling Frame

Enrollees or beneficiaries

Denominator (Index) Event or Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Patients who received a target medication*

Note:

Continuous Enrollment:

Using Enrollment Data: Subjects should be continuously enrolled during the measurement period. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 consecutive days] is not considered continuously enrolled).

Proxy for Enrollment When Using Pharmacy-only Data: Two or more prescriptions for any medication, with 150 days between the first fill and the last fill, over a 12 month period.

Measurement Period: The measurement period is generally a calendar year and extends through the last day of the enrollment period or until death or disenrollment.

*Refer to Table DDI-A in the original measure documentation for beta target medications.

Exclusions

None

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The number of patients in the denominator who were dispensed a concurrent precipitant medication* during the measurement period

Note:

Concurrent Prescription: The prescriptions for the target and precipitant medications are considered to be concurrent if the covered days for the precipitant medication has any day(s) of overlap with the target medication(s).

Measurement Period: The period of time over which the prescription medication fill pattern is assessed. This is typically 12 months.

*Refer to Table DDI-A in the original measure documentation for precipitant medications.

Exclusions

None

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Pharmacy data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

None

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a lower score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid product lines.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Drug-drug interactions.

Measure Collection Name

Pharmacy Quality Alliance (PQA) Measures

Measure Set Name

Medication Safety Measures

Submitter

Pharmacy Quality Alliance - Clinical Quality Collaboration

Developer

Pharmacy Quality Alliance - Clinical Quality Collaboration

Funding Source(s)

None

Composition of the Group that Developed the Measure

PQA Workgroup

Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Jul

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

2015

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in November 2015.

Measure Availability

Source not available electronically.

For more information, contact the Pharmacy Quality Alliance (PQA) at 6213 Old Keene Mill Court, Springfield, VA 22152; Phone: 703-690-1987; Fax: 703-842-8150; Web site: www.pqaalliance.org ; Email: info@PQAalliance.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on August 4, 2014. The information was verified by the measure developer on September 24, 2014.

The information was reaffirmed by the measure developer on November 2, 2015.

Copyright Statement

Production

Source(s)

Pharmacy Quality Alliance (PQA). Technical specifications for PQA approved measures. Springfield (VA): Pharmacy Quality Alliance (PQA); 2015 Jul. 66 p.

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Readers with questions regarding measure content are directed to contact the measure developer.